

Claims

What is claimed is:

1. A disposable absorbent article comprising:
 - (i) an absorbent core defining a surface area;
 - (ii) a stretchable multilayer chassis defining a surface area, wherein the multilayer chassis is stretchable in at least the cross-machine direction;

wherein the stretchable multilayer chassis comprises at least:

- (a) a stretchable bodyside liner; and
- (b) a stretchable outer cover;

such that the absorbent core is affixed to at least one layer of the stretchable multilayer chassis, wherein the percentage ratio of the surface area of the absorbent core to the surface area of the stretchable multilayer chassis is less than about 50%.

2. The disposable absorbent article of claim 1, which is a diaper.
3. The disposable absorbent article of claim 1, wherein the percent ratio of the absorbent core relative to the stretchable multilayer chassis is 40% or less.
4. The disposable absorbent article of claim 1, wherein the percent ratio of the absorbent core relative to the stretchable multilayer chassis is 30% or less.
5. The disposable absorbent article of claim 1, wherein the stretchable bodyside liner is extensible in the machine direction, the cross-machine direction, or biaxially extensible in both the machine direction and cross-machine direction.
6. The disposable absorbent article of claim 5, wherein the stretchable bodyside liner is

extensible in at least the cross-machine direction.

7. The disposable absorbent article of claim 5 wherein the extensible bodyside liner is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

8. The disposable absorbent article of claim 5 wherein the extensible bodyside liner is configured to provide an elongation of at least about 25 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

9. The disposable absorbent article of claim 5 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

10. The disposable absorbent article of claim 5 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

11. The disposable absorbent article of claim 1, wherein the stretchable bodyside liner is elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine direction and cross-machine direction.

12. The disposable absorbent article of claim 11, wherein the stretchable bodyside liner is elastic in at least the cross-machine direction.

13. The disposable absorbent article of claim 1, wherein the stretchable outer cover is extensible in at least the cross-machine direction.

14. The disposable absorbent article of claim 13 wherein the extensible outer cover is

configured to provide an elongation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

15. The disposable absorbent article of claim 13 wherein the extensible outer cover is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

16. The disposable absorbent article of claim 13 wherein the extensible outer cover is configured to provide an elongation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

17. The disposable absorbent article of claim 13 wherein the extensible outer cover is configured to provide an elongation of at least about 40 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

18. The disposable absorbent article of claim 13 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 17 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

19. The disposable absorbent article of claim 13 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

20. The disposable absorbent article of claim 13, wherein the extensible outer cover comprises a necked laminate, which includes at least one layer of a non-elastic neckable material and at least one layer of a non-elastic film.

21. The disposable absorbent article of claim 1, wherein the stretchable outer cover is elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine

direction and cross-machine direction.

22. The disposable absorbent article of claim 21, wherein the stretchable outer cover is elastic in at least the cross-machine direction.

23. The disposable absorbent article of claim 21, wherein the elastic outer cover comprises a polypropylene spunbond that is laminated with styrene-isoprene-styrene-based adhesive.

24. A disposable absorbent article comprising:

- (i) an absorbent core defining a surface area;
- (i) a stretchable multilayer chassis defining a surface area, wherein the multilayer chassis is stretchable in at least the cross-machine direction;

wherein the stretchable multilayer chassis comprises at least:

- (a) a stretchable bodyside liner; and
- (b) a stretchable outer cover;

such that the absorbent core is affixed to at least one layer of the stretchable multilayer chassis, wherein the percentage ratio of the surface area of the back one-half portion of the absorbent core to the corresponding surface area of the back one-half portion of the stretchable multilayer chassis is less than about 50%.

25. The disposable absorbent article of claim 24, which is a diaper.

26. The disposable absorbent article of claim 24, wherein the percent ratio of the surface area of the back one-half portion of the absorbent core relative to the surface area of the back one-half portion of the stretchable multilayer chassis is 40% or less.

27. The disposable absorbent article of claim 24, wherein the percent ratio of the surface area of the back one-half portion of the absorbent core relative to the surface area of the back one-half portion of the stretchable multilayer chassis is 30% or less.

28. The disposable absorbent article of claim 24, wherein the stretchable bodyside liner is extensible in the machine direction, the cross-machine direction, or biaxially extensible in both the machine direction and cross-machine direction.

29. The disposable absorbent article of claim 28, wherein the stretchable bodyside liner is extensible in at least the cross-machine direction.

30. The disposable absorbent article of claim 28 wherein the extensible bodyside liner is configured to provide an elongation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

31. The disposable absorbent article of claim 28 wherein the extensible bodyside liner is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

32. The disposable absorbent article of claim 28 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

33. The disposable absorbent article of claim 28 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

34. The disposable absorbent article of claim 24, wherein the stretchable bodyside liner is

elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine direction and cross-machine direction.

35. The disposable absorbent article of claim 34, wherein the stretchable bodyside liner is elastic in at least the cross-machine direction.

36. The disposable absorbent article of claim 24, wherein the stretchable outer cover is extensible in at least the cross-machine direction.

37. The disposable absorbent article of claim 36 wherein the extensible outer cover is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

38. The disposable absorbent article of claim 36 wherein the extensible outer cover is configured to provide an elongation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

39. The disposable absorbent article of claim 36 wherein the extensible outer cover is configured to provide an elongation of at least about 40 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

40. The disposable absorbent article of claim 36 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 17 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

41. The disposable absorbent article of claim 36 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

42. The disposable absorbent article of claim 36, wherein the extensible outer cover comprises a necked laminate, which includes at least one layer of a non-elastic neckable material and at least one layer of a non-elastic film.

43. The disposable absorbent article of claim 24, wherein the stretchable outer cover is elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine direction and cross-machine direction.

44. The disposable absorbent article of claim 43, wherein the stretchable outer cover is elastic in at least the cross-machine direction.

45. The disposable absorbent article of claim 43, wherein the elastic outer cover comprises a polypropylene spunbond that is laminated with styrene-isoprene-styrene-based adhesive.

46. A disposable absorbent article comprising:

- (i) an absorbent core defining a surface area;
- (ii) a stretchable multilayer chassis defining a surface area, wherein the multiplayer chassis is stretchable in at least the cross-machine direction;

wherein the stretchable multilayer chassis comprises at least:

- (a) a stretchable bodyside liner; and
- (b) a stretchable outer cover;

such that the absorbent core is affixed to at least one layer of the stretchable multilayer chassis, wherein the percentage ratio of the surface area of the front one-half portion of the absorbent core to the corresponding surface area of the front one-half portion of the stretchable multilayer chassis is less than about 50%.

47. The disposable absorbent article of claim 46, which is a diaper.
48. The disposable absorbent article of claim 46, wherein the percent ratio of the surface area of the front one-half portion of the absorbent core relative to the surface area of the front one-half portion of the stretchable multilayer chassis is 40% or less.
49. The disposable absorbent article of claim 46, wherein the percent ratio of the surface area of the front one-half portion of the absorbent core relative to the surface area of the front one-half portion of the stretchable multilayer chassis is 30% or less.
50. The disposable absorbent article of claim 46, wherein the stretchable bodyside liner is extensible in the machine direction, the cross-machine direction, or biaxially extensible in both the machine direction and cross-machine direction.
51. The disposable absorbent article of claim 50, wherein the stretchable bodyside liner is extensible in at least the cross-machine direction.
52. The disposable absorbent article of claim 50 wherein the extensible bodyside liner is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.
53. The disposable absorbent article of claim 50 wherein the extensible bodyside liner is configured to provide an elongation of at least about 25 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.
54. The disposable absorbent article of claim 50 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

55. The disposable absorbent article of claim 50 wherein the extensible bodyside liner is configured to provide a substantially permanent deformation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

56. The disposable absorbent article of claim 46, wherein the stretchable bodyside liner is elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine direction and cross-machine direction.

57. The disposable absorbent article of claim 56, wherein the stretchable bodyside liner is elastic in at least the cross-machine direction.

58. The disposable absorbent article of claim 46, wherein the stretchable outer cover is extensible in at least the cross-machine direction.

59. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide an elongation of at least about 10 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

60. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide an elongation of at least about 20 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

61. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide an elongation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

62. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide an elongation of at least about 40 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

63. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 17 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

64. The disposable absorbent article of claim 58 wherein the extensible outer cover is configured to provide a substantially permanent deformation of at least about 30 percent when subjected to the tensile force of 100 gmf per inch (per 2.54 cm) of width.

65. The disposable absorbent article of claim 58, wherein the extensible outer cover comprises a necked laminate, which includes at least one layer of a non-elastic neckable material and at least one layer of a non-elastic film.

66. The disposable absorbent article of claim 46, wherein the stretchable outer cover is elastic in the machine direction, the cross-machine direction, or biaxially elastic in both the machine direction and cross-machine direction.

67. The disposable absorbent article of claim 6 wherein the stretchable outer cover is elastic in at least the cross-machine direction.

68. The disposable absorbent article of claim 66, wherein the elastic outer cover comprises a polypropylene spunbond that is laminated with styrene-isoprene-styrene-based adhesive.